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## Zooming Past Motor-Voter: An Analysis of How Automatic Voter Registration Policies Impact Voter Turnout in the United States

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# Zooming Past Motor-Voter: An Analysis of How Automatic Voter Registration Policies Impact Voter Turnout in the United States

## Abstract

In the 1990s, the National Voter Registration Act (NVRA) mandated that motor vehicle agencies process voter registration applications in a policy known as motor-voter. From motor-voter emerged automatic voter registration, or AVR, wherein eligible voters are registered to vote automatically from a transaction with certain state-designated agencies. In 2016, Oregon became the first state to implement an automatic voter registration policy, though a number of states have since followed. In this paper, I analyze the impact of AVR on rates of voter turnout and rates of voter registration, making this paper among the first to identify the effect of automatic voter registration on voter turnout. Using difference-in-difference models, I compare changes in turnout by age, race, and state partisan control for the states that have implemented AVR policies to changes in turnout by age, race, and state partisan control for the states that have not adopted AVR policies. I also compare changes in registration for the states that have implemented AVR policies to changes in registration for the states that have not adopted AVR policies. Using data from the 2012, 2014, 2016, and 2018 Election Administration and Voting Surveys as well as data from the 2012, 2014, 2016, and 2018 Current Population Survey's Voting and Registration Supplements, I find AVR to have a small but positive impact on overall rates of voter registration and voter turnout. This study has implications for states pondering the adoption of automatic voter registration policies and adds to the body of literature examining the impact of electoral reforms on voter turnout.

## Keywords

political science, voting reform, electoral reform, automatic voter registration, AVR, voter turnout, voter registration, Election Administration and Voting Surveys, EAVS, Current Population Survey, CPS, Social Sciences, Political Science, Marc Meredith, Meredith, Marc

## Disciplines

American Politics | Political Science | Social and Behavioral Sciences

**Zooming Past Motor-Voter: An Analysis of How Automatic Voter  
Registration Policies Impact Voter Turnout in the United States**

**By**

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**Advisor: Dr. Marc Meredith**

**This thesis is submitted in fulfillment of**

**Bachelor of Arts Degree  
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College of Arts and Sciences  
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## Abstract

*In the 1990s, the National Voter Registration Act (NVRA) mandated that motor vehicle agencies process voter registration applications in a policy known as motor-voter. From motor-voter emerged automatic voter registration, or AVR, wherein eligible voters are registered to vote automatically from a transaction with certain state-designated agencies. In 2016, Oregon became the first state to implement an automatic voter registration policy, though a number of states have since followed. In this paper, I analyze the impact of AVR on rates of voter turnout and rates of voter registration, making this paper among the first to identify the effect of automatic voter registration on voter turnout. Using difference-in-difference models, I compare changes in turnout by age, race, and state partisan control for the states that have implemented AVR policies to changes in turnout by age, race, and state partisan control for the states that have not adopted AVR policies. I also compare changes in registration for the states that have implemented AVR policies to changes in registration for the states that have not adopted AVR policies. Using data from the 2012, 2014, 2016, and 2018 Election Administration and Voting Surveys as well as data from the 2012, 2014, 2016, and 2018 Current Population Survey's Voting and Registration Supplements, I find AVR to have a small but positive impact on overall rates of voter registration and voter turnout. This study has implications for states pondering the adoption of automatic voter registration policies and adds to the body of literature examining the impact of electoral reforms on voter turnout.*

## Introduction

In this section, I give a brief overview of AVR, including its history and position as a logical successor to motor-voter polices. I present the arguments for and against AVR, and then I elaborate on the goals of the policy, which include maintaining up-to-date voter registration rolls, increasing voter registrations and overall voter turnout, and closing existing gaps in voter turnout. I enrich my articulation of these goals with relevant literature that reckons with the validity of these goals. Lastly, I describe both my research question and the gaps in the literature I am hoping to fill with my analysis.

You could say it all started with motor-voter. In 1993, Congress passed the National Voter Registration Act, or NVRA. It is associated with the nickname motor-voter because of a section of the legislation stipulating that motor vehicle agencies must double as locations for the submission of voter registration applications (Brown and Weddeking 2006). The impact of the National Voter Registration Act is profound and lasting, since approximately one-third of voter registration applications were processed from a motor vehicle facility between the 2014 and 2016 election cycles, and approximately forty-five percent of registrations were processed from a motor vehicle facility between the 2016 and 2018 election cycles, according to the National Conference of State Legislatures.

We can think of the National Voter Registration Act as a precursor to automatic voter registration, or AVR, in which eligible voters are registered to vote automatically by state-designated agencies. Though states have implemented the policy differently, its purpose seems to hinge on getting eligible voters to actively decline their registration, instead of passively as with motor-voter (McGhee and Romero 2019). Oregon was the first state to adopt such a policy in early 2016, and the state policy was crafted such that eligible voters are first added to the voter

rolls and given the ability to opt-out at a later date. However, the manner by which voters are able to opt-out of automatic voter registration differs from state to state among the few states that have since implemented AVR policies. In some states, voters are asked whether they would like to opt out of being automatically registered while they are at the state-designated agency in question. In other states, voters are contacted by mail after they have already been automatically registered and are asked to send mail back should they like to be opted out of automatic voter registration (McGhee and Romero 2019). In addition, while most automatic voter registration occurs at state motor vehicle agencies, some states allow AVR to take place at other state-designated agencies. The automatic voter registration policy implemented by Alaska operates separately from any motor vehicle agency and in fact operates through the state's Permanent Fund Dividend, according to the National Conference of State Legislatures. Of the states that have adopted automatic voter registration, some explicitly call for a public education campaign on the policy. Furthermore, there are several states that have yet to adopt any contemporary automatic voter registration policy.

Proponents of automatic voter registration cite a number of reasons for their support. I will now provide a simple overview of their arguments. First, they say that the policy will increase voter participation by making the registration process easier. The registration deadline and application submission process can present a burden to some eligible voters, so those in favor of AVR argue that the policy simplifies voter registration in a necessary way. Furthermore, automatic voter registration cleans voter rolls, since AVR policies automatically update registrations with current addresses, according to the National Conference of State Legislatures. This subsequently reduces the number of provisional ballots that are used, which makes the electoral process more precise and efficient.



Of course, the policy is not without its opponents, and I will provide a simple overview of those arguments as well. Some view automatic voter registration policies as government interference in the business of citizens. In other words, AVR, to some, serves as a mandate that citizens must register to vote. Critics also question the adequacy of one opt-out process that requires a voter mail a card indicating his or her choice to opt out of automatic registration. Furthermore, critics are concerned that AVR policies are susceptible to fraud or interference, perhaps opening a window for noncitizens to vote. Ultimately, since there is little compelling evidence that automatic voter registration policies have a positive or negative impact on voter turnout overall, the policies' opponents and proponents cannot yet make an argument on that point.

There are several goals associated with the implementation of automatic voter registration policies, helpfully outlined in a recent paper on automatic voter registration. Though I will discuss the methodology and results of the paper later in this thesis, I will for now articulate and expand upon the goals of AVR, building off the arguments for and against AVR outlined above. As mentioned previously, AVR is viewed as a hopefully effective method for maintaining up-to-date voter registration rolls, which is positive for both citizens and election administrators. Frequent movers or forgetful state residents do not have to worry about re-registering to vote, which can complicate and even restrict one's ability to vote in the next election. Frequent movers or forgetful state residents already involved with the appropriate government agency, albeit for different reasons, will thus find their re-registration process already completed under AVR policies. In addition, election administrators do not need to wonder which records are permanently inactive and which could be active if updated

appropriately. Thus, AVR policies allow for the existence of voter rolls containing the latest and most accurate registration information (McGhee and Romero 2019).

A second goal of automatic voter registration policies is to increase registration and subsequently increase voter turnout. This goal is predicated on a few assumptions. One assumption, quite reasonable, is that there are several residents within a state eligible to both register to vote and to vote altogether. Another assumption, which is harder to fathom, is that these residents would both register to vote and vote if only they had not previously experienced complications with voter registration. A final assumption, again reasonable, is that these residents would consent to automatic voter registration in the first place. Given the ease associated with voter registration under AVR policies, the third assumption, again, does not seem insurmountable in the least. However, this overall goal that AVR might increase both registration and turnout seems more complicated than the first goal discussed, since there are certainly many reasons why someone eligible to vote might not do so, whether they are registered to vote or not (McGhee and Romero 2019).

A last goal of AVR is to improve gaps in voter turnout. Increasing voter registration and turnout in absolute terms is certainly valuable to those who deal in public policy, but increasing registration and turnout among underrepresented populations is an even more elusive and desirable outcome, especially given previous findings that the mean income of society is diverging with increasing inequality from the income of the median voter (see Meltzer and Richard 1981 in Leighley and Nagler 2014). Other scholars, also looking to improve voter turnout among underrepresented populations, actually oppose electoral policy reforms, given scholarship indicating that these reforms may actually increase socioeconomic bias among the composition of voters (Berinsky 2005). I must note that automatic voter registration can be

categorized as an electoral policy reform along with measures such as early in-person voting, absentee voting, and same-day registration, since AVR seeks to ease barriers to entry for prospective voters in a manner similar to these other electoral policies. Nevertheless, since the impact of AVR policies on voter turnout generally as well as on voter turnout among key demographic groups has not been widely examined before now, we cannot conclude whether these policies will aid in or detract from the goal of improving gaps in voter turnout, though I hope to be better able to answer that question by the end of this thesis.

Thus, I have carefully worked through the implications of the goals for AVR expressed by political scientists and policy analysts, bringing in existing scholarship to assess these goals fairly. What, exactly, did this exercise reveal? The need for investigation into voter turnout as a function of automatic voter registration policies is great. First, since AVR policies are new, there has been little research on their impact on voter turnout due to a lack of available data for the election cycles affected by recently implemented automatic voter registration policies. Second, AVR seems to be part of a larger trend of electoral reform and advancement, along with previously mentioned policies such as same day registration, absentee voting, and early in-person voting. The overall goal of these policies is to increase voter turnout, generally through the medium of voter registration, so it must broadly be determined as to whether these policies, among them automatic voter registration, seem to meet this goal. Third, the decentralization of federal electoral policies means that AVR likely varies from state to state and thus requires in-depth analysis in order to be discussed in generalizable terms.

My research, aiming to address these gaps in the academic discourse, centers around the following question: how is voter turnout impacted by automatic voter registration policies? In the process of answering this question, I will explore turnout and registration before and after the

implementation of an automatic voter registration policy as well as turnout and registration for states that have implemented an AVR policy and for states that have not. In service of this question, I will now give an overview of significant studies of voter turnout, preliminary research into automatic voter registration, and the data sources and measurement processes useful in analyses such as these in order to endow a sense of legitimacy to my own forthcoming calculations of voter turnout.

## **Literature Review**

### **Status Quo of Automatic Voter Registration and Initial Research**

In this section, I present informative summaries of data related to AVR, such as participating states and distinctions between policies, while also calling attention to differences in how AVR is defined across organizations involved in public policy. I present examples of how AVR has been perceived differently based on its implementation in different states. I then provide an in-depth look into one of the only formal analyses of AVR, expanding upon the methodology, findings, and useful categorizations of AVR policies within the study. Lastly, I describe the only analysis I have been able to find that asks my same research question, though the analysis was informal and more limited than what I intend to present in this thesis.

Accordingly, I tie the findings into my vision for my own analysis.

The National Conference of State Legislatures, or NCSL, has aggregated a wealth of information about automatic voter registration policies in the United States, including the states that participate in automatic voter registration, the participating state agencies, and the ways in which each participating state has structured its opt-out program so that eligible voters who are automatically registered can cancel that registration should they desire to do so later. For

example, some states present the option to opt out of automatic voter registration at the state-designated agency itself, while other states will mail a notice to voters after they have already been enrolled, inviting them to opt out. As of 2019, automatic voter registration bills have been introduced in 39 states, but only 18 states and the District of Columbia have enacted an AVR policy, including Alaska, California, Colorado, Connecticut, Georgia, Illinois, Maine, Maryland, Massachusetts, Michigan, New Jersey, New Mexico, Nevada, Oregon, Rhode Island, Vermont, Washington, and West Virginia. It must be noted that the year the policy is enacted differs from the year it is implemented, given a lag between the passing of AVR legislation and the next election cycle. Furthermore, all but three states allow voters to opt out of AVR during the transaction at the state-designated agency itself.

The Brennan Center for Justice has also aggregated information about automatic voter registration policies and in doing so has revealed a tension within studies of AVR, since the NCSL and the Brennan Center vary in how each defines automatic voter registration. The National Conference of State Legislatures considers both opt-in and opt-out policies as permissible in the design of an AVR policy. Unlike the opt-out policies described early in this thesis, wherein eligible voters are automatically registered to vote and are afterwards given the opportunity to cancel their registration, opt-in policies ask eligible voters to confirm that they would like to be automatically registered to vote before the process takes place. The Brennan Center, on the other hand, only defines automatic voter registration policies as those that contain opt-out policies for voters (“Policy Differences of Automatic Voter Registration”). Thus, the Brennan Center excludes Connecticut and New Mexico from its analysis of states that have implemented automatic voter registration, citing the states’ adoption of opt-in policies, while the

NCSL includes Connecticut and New Mexico in its list of states that have enacted automatic voter registration policies.

Ultimately, the information synthesized by these politically oriented groups is helpful for developing a basic knowledge of automatic voter registration, especially since the electoral reform is quite new. Yet the discrepancies in how each organization understands AVR serve as an important warning. Namely, political scientists studying automatic voter registration in the future must define exactly what such a policy entails within the scope of their analysis. Within my thesis, I will define AVR as it is defined by the NCSL. This specifically means I will consider states with opt-in voter registration policies as AVR states in my conception and quantitative modeling of the electoral reform because, for my purposes, the result of opt-in or opt-out policies is the same: automatically added or updated registrations. Thus, a comparison of automatic voter registration primers authored by researchers at the National Conference of State Legislatures and the Brennan Center for Justice demonstrates a lack of cohesion among those who deal in policy with how AVR is practiced across the U.S. and highlights the need for clear explanations of how the policy might be understood in academic literature on AVR.

To effectively reckon with a research question about automatic voter registration, it is helpful to understand how the policy has been perceived, and from contemporary political coverage and analysis, we might say the practice of AVR has received mixed reviews. According to data collected by the 2014 and 2016 Election Administration and Voting Surveys, voter registrations increased by about 12 percent and voter turnout increased by about 18 percent in Oregon after the adoption of an AVR policy in 2016. Based on these results, the newly implemented policy was deemed a success by both reporters for national news outlets and Oregon state officials (Chokshi 2016; Oprysko 2019). However, an investigation sponsored by

the Pew Charitable Trusts revealed glitches in California's more recently implemented automatic voter registration policy. Indeed, some of the registration errors that occurred included voters being registered to the wrong political party and at least one noncitizen being registered to vote (Vasilogambros 2019). These conflicting accounts of the success of AVR policies further indicate the need for independent research on the subject that may more conclusively identify its strengths and weaknesses as a mechanism for electoral reform.

While academic literature on automatic voter registration is sparse, which is understandable given the first state to adopt the policy did so only four years prior, some preliminary research on the efficacy of automatic voter registration policies does exist. In one analysis, already referenced in this thesis, the existence of automatic voter registration policies serves as the independent variable and voter registrations, not voter turnout, serve as the dependent variable. McGhee and Romero, in this recent academic piece, assess both overall turnout across several states and turnout within racial and ethnic minority communities. Using a difference-in-difference approach that I will analyze in greater depth later on in this thesis as well as a synthetic control approach, the authors find overall registration effects to be solid but not large, with AVR policies accompanied by an approximate two percentage point increase in registrations. This investigation into the effects of automatic voter registration is also of note because it found evidence that AVR policies have boosted the registration of Latinx voters in most states (McGhee and Romero 2019). This insight may shape the arguments of proponents of automatic voter registration policies, as the authors provide credible evidence that AVR policies can increase voter registration within racial and ethnic communities that reckon with electoral underrepresentation. In any case, McGhee and Romero provide an incredibly useful understanding of how best to proceed when undertaking a quantitative analysis of automatic

voter registration, especially given their methodology, which is designed to reduce noise, and their choice to utilize demographic control variables, which I will mimic in my analysis in the hope that it will lead to a more fruitful understanding of the effects of AVR on voter turnout.

Another contribution from McGhee and Romero's scholarship is the technical explanation the authors provide regarding the nuances of different AVR policies, which is particularly helpful as these differences have not been clarified in other literature on the subject. The pair discuss the differences between back-end and front-end AVR as well as the differences between default registration and forced choice in AVR policies. According to their review of automatic voter registration policies, states with back-end AVR policies do not bring up voter registration during a transaction at a state-sponsored agency any longer. Instead, after the transaction at the agency, state election officials determine whether an individual is eligible to vote, automatically register that individual to vote, and then contact that individual offering him or her the chance to opt out of the automatic registration policy. In contrast, states with front-end AVR policies will offer residents the option of voter registration directly at the state-sponsored agency. If they are so inclined, residents are then permitted to opt out, an interaction which thus becomes a part of the overall transaction (McGhee and Romero 2019).

McGhee and Romero also delve into the distinction between default option and forced choice automatic voter registration policies, which is somewhat connected to the discussion of front- and back-end AVR. In states that have altered the default option, residents who are eligible to vote are placed into an automatic voter registration program and must actively choose to opt out. All back-end AVR states currently use default registration. However, some front-end states have also adopted the default option. For example, at the agency associated with automatic voter registration, an eligible voter must check a box on the agency's form to decline registration. If



the eligible voter does not check the box, he or she will be registered to vote. Still other front-end AVR states work with a forced choice mechanism in which a resident's transaction at the state-sponsored agency cannot be completed unless he or she answers the voter registration question (McGhee and Romero 2019). Having influenced my approach to my research topic in a number of profound ways, this study on automatic voter registration from McGhee and Romero also illuminates two methods of categorizing AVR policies, as each is considered either a front-end or back-end policy as well as either a default option or forced choice policy. I will keep these technical definitions with me as I continue to examine automatic voter registration policies, developing my own findings with these understandings when applicable.

Finally, analysts at FiveThirtyEight have provided what seems to be one of the first assessments of the impact of automatic voter registration policies on turnout, though this assessment was not a formal undertaking. Interestingly, the findings of this recent project do not necessarily indicate a particular direction in the relationship between AVR and turnout. Indeed, overall turnout in the AVR states of Colorado, Oregon and Vermont during the 2018 midterm elections was significantly higher than turnout among people who were registered automatically, suggesting that individuals who registered themselves were much more likely to vote. Yet in Rhode Island, the automatic voter registration and overall turnout rates were similar, while turnout was higher among those who had been automatically registered than the general population in the District of Columbia (Rakich 2019). Thus, this brief statistical exercise demonstrates that further research is required to determine whether AVR policies as a whole seem to have a positive or negative effect on voter turnout, and I plan to build on the author's choice to isolate turnout only in states that have adopted AVR policies, since my research will compare registration and turnout in states that have and have not adopted an AVR policy.

## **Informative Findings on Voter Registration and Turnout**

In this section, I illustrate other scholarship on voter registration and turnout, seeking to identify variables that serve as predictors for turnout. I find that electoral policy reforms do not impact voter turnout in similar ways. Indeed, I find that studies of identical policy reforms do not always have similar findings about the impact of these policies on voter turnout. Within this section, I also provide a closer look at the significance of the NVRA and motor-voter. Incidentally, motor-voter, along with early in-person voting, are two electoral policy reforms whose significance scholars disagree on, since the analyses conducted on these policies have different findings of their effects on voter turnout.

My interest in electoral innovations such as voter registration reforms stems from my fascination with how the effects of such policies shape political participation. While proponents of registration reforms posit that registration, particularly automatic voter registration, can serve as a predictor for voter turnout, a perusal of relevant literature reveals that this may not necessarily hold true. Daniel Stockemer, synthesizing over 130 research articles from 2004 to 2013 that assign as the dependent variable national, regional, and local voter turnout, has found strong evidence that only certain conditions may prove to have a positive effect on turnout. Stockemer finds consensus in the literature that supports only a few strong predictors of voter turnout, including compulsory voting, the importance of the election, and the size of the country—namely, he finds substantial support that turnout is higher in small countries. However, the effects of other predictor variables, such as the type of electoral system, the number of political parties, and income inequalities, are inconclusive (Stockemer 2017). Therefore, existing literature does not favor the possibility that all registration reforms, perhaps including automatic voter registration, will have a strong positive effect on voter turnout or even serve as a

conclusive predictor of turnout. From Stockemer's findings, researchers including myself should remember that the determinants of voter turnout may largely depend on context. However, the scope of Stockemer's analysis predates the policy I wish to analyze, which means I should not immediately assume to find an insignificant effect on voter turnout as a result of automatic voter registration policies.

Stockemer's findings align with those of other political scientists who have found that not all electoral policies have an ameliorating effect on voter turnout, which again belies the logical assumption that there is a positive relationship between reform attempts to expand the voting electorate and voter turnout. Of course, some registration policies have been observed to have such an effect. Indeed, Election Day registration, or same-day registration, has been found to have a positive effect on turnout (Fenster 1994; Burden et al 2014; Leighley and Nagler 2014). Yet political scientists are not in agreement on the effect of another electoral reform, early in-person voting, on voter turnout. Some literature on early in-person voting suggests that the policy has a statistically significant and positive effect on turnout (Gronke et al 2007). Other literature, however, suggests that early in-person voting policies can be associated with lower turnout rates when implemented by themselves or that the effects of early in-person voting policies on turnout are ambivalent at best (Burden et al 2014; Leighley and Nagler 2014). In another project isolating the state of Wisconsin, Burden and a colleague identify voter registration as a factor thought to have a negative effect on voter turnout altogether, supporting the decades-older findings of Wolfinger and Rosenstone that registration is a key obstacle to voting (Wolfinger and Rosenstone 1980). Interestingly, Burden's investigation also notes that the administrative capacities of local election officials are important in determining the extent to which registration affects turnout, with Burden and Neiheisel arguing that municipalities with less capacity are

associated with bigger decreases in turnout (Burden and Neiheisel 2013). This is a point that may be worth revisiting later in my analysis of AVR policies, and if I am unable to do so, is worth addressing in future analyses of AVR.

In any case, these findings from Stockemer, Gronke et al, and Burden et al counter claims that all policies meant to ease any current logistical or timeliness issues associated with voting will empirically increase voter turnout, though some policies may certainly do so as evidenced by the positive effects on voter turnout associated with Election Day registration. As an aside, these disparate findings may motivate political scientists to consider whether early in-person voting and other electoral reforms related to registration or turnout, such as AVR, alter the incentives for voter mobilization. Again, however, these studies indicate that policy analysts must be prepared for the fact that electoral policy innovations may not impact turnout in expected or predicted ways.

It may also be helpful to understand the impact of motor-voter and the National Voter Registration Act, or the NVRA, given the aforementioned status of that legislation as a predecessor to the newer automatic voter registration policies that I am focusing on here. The NVRA mandates, for all states without Election Day voter registration policies, the establishment of mail-in and agency-based registration programs. The key component of the legislation, called motor-voter, is that applications for a driver's license must also include a voter registration application, and some data indicate that motor-voter is the most effective provision of the NVRA (Knack 1995). Beginning in 2016, motor-voter was taken a step further with automatic voter registration policies. While voter registration applications are still available at motor vehicle and other state-designated agencies, AVR is a distinct policy innovation from motor-voter in that it eliminates the need to separately fill out and submit voter registration applications. Voters, in the

midst of a transaction at a motor vehicle or other government agency, are now either automatically registered to vote or are asked if they would like to be registered and cannot proceed with the transaction if they do not answer. I must return to a previously discussed point, which is that some analyses of automatic voter registration exclude from the category of AVR policies those policies that require a voter to opt in to automatic registration, perhaps due to perceived similarities with the motor-voter policy. Nevertheless, as mentioned previously, there is a difference between opt-in automatic voter registration policies and motor-voter policies, which is why my analysis henceforth will consider all states with streamlined opt-in and opt-out voter registration policies AVR states.

As previously demonstrated, scholarly literature analyzing voter turnout as impacted by a particular electoral policy can yield different interpretations of significance, and this phenomenon holds true for assessments of the NVRA and motor-voter. Older analyses of motor voter, using state-level registration and turnout data, find that motor-voter significantly increased rates of political participation (Knack 1995). However, a more recent analysis of motor-voter finds that the legislation fails to transmit registration into turnout, perhaps due to an increase in the relative income equality of new registrants. Since motor-voter encourages lower income citizens to register to vote, Brown and Weddeking argue, citing voter participation rates, that the NVRA helped create a pool of registered citizens less likely to vote (Brown and Weddeking 2006). Another more recent publication from the Pew Charitable Trusts discloses difficulties in measuring the effectiveness of motor-voter, particularly in determining the number of voter registration applications that originate in motor vehicle agencies given inconsistencies in registration transactions across states and incomplete records kept by motor vehicle agencies (“Measuring Motor Voter”). Thus, literature on motor-voter, like literature on other electoral

reforms aimed at increasing registration, embodies a lack of consensus in the field about the impact of registration reforms on turnout. This indicates my findings may not comfortably co-exist with previous examinations of registration and turnout, but the gaps in literature that will be addressed by my thesis are incentive to try, nonetheless.

## **A Recurring Model for Analyzing Voter Turnout**

In this section, I describe and present the significance of the difference-in-difference model for conducting analyses on the effects of electoral policy reforms on voter turnout. The model, utilized among different studies of voter turnout, can minimize noise in ways I describe in this section. Given its broad utilization in research similar to my own, I plan to use the difference-in-difference model in seeking answers to my research question.

In measuring voter turnout, existing literature can guide scholars to oft utilized and therefore credible data sources as well as methodologies that seek to minimize noise. Some studies of turnout use a single cross-section of individual or aggregate data at the national, state, or county levels, while others analyze changes in turnout over time in a single state, again using individual or aggregate data at the national, state, or county levels. However, assessing the impact of a particular electoral policy is considered a causal question, and the methodology must be designed appropriately. Simply comparing states who have adopted a policy innovation to those who have not is insufficient, given the possibility that the adoption of the policy innovation is correlated with other factors related to turnout. For example, states where turnout is higher before the implementation of a new electoral reform may also choose to adopt reforms designed to increase turnout. In addition, while there is value in comparing turnout within a state directly before and after the implementation of an electoral reform, we cannot necessarily separate the

impact of the electoral reform from an independent change in turnout that affected that state in that election year (Leighley and Nagler 2014).

Therefore, the literature indicates that a difference-in-difference approach is well-suited for isolating the effects of the policy intervention. The model seeks to account for unmeasured differences in turnout between states that have adopted an electoral reform and other states that are constant over time, policy-wise, as well as any shifts in the dependent variable that occurred uniformly across states. The model functions by comparing the difference in turnout in states that have adopted an electoral reform to the difference in turnout in states that have not adopted the electoral reform, thus demonstrating the impact on turnout of the electoral reform (Leighley and Nagler 2014). In McGhee and Romero's recent analysis of the impact on registrations of AVR policies, the difference-in-difference model is utilized, with voter registrations acting as the dependent variable as opposed to voter turnout. However, the authors are still able to establish a relationship between automatic voter registration policies and voter registrations (McGhee and Romero 2019). The ability of the model to account for the isolated effects of an electoral policy innovation as well as the model's use in relevant literature make the difference-in-difference approach a good method to analyze turnout data given the implementation of AVR policies. Later in this thesis, I will explain how exactly I utilize the difference-in-difference approach to model my findings.

## **Applying the Research Question to Theories of Voter Turnout**

In this section, I analyze existing theories of voter turnout in conjunction with relevant literature to better understand connections between automatic voter registration and voter turnout, both as a whole and across multiple demographics. The theories I draw from include the cost-benefit analysis approach to voter turnout, theories of education and information availability

as predictors for voter turnout, and the theory of individual observance of the status quo against personal preferences. I also examine studies of voter turnout by race, age, and broad and narrow electoral policies to identify meaningful links to the predictive relationships I will soon posit. Ultimately, this section serves to develop and justify the hypotheses I will present in the following section, since my hypotheses must be oriented within existing theories of voter turnout. Another perhaps obvious role of this section is to put a critical lens to the different and significant ways in which voter turnout behavior has been theorized.

A well-known theory of voting behavior involves the turnout decision as subject to a cost-benefit analysis. According to this theory, citizens will vote when the cost of doing so is not outweighed by the benefits (see Leighley and Nagler 2014). Under this model, we might consider to be costs the time it takes to travel to and from a poll station, the time spent waiting at the poll station, the challenges associated with meeting registration requirements, such as completing and mailing paperwork before a deadline, and the effort spent deciding vote choice. Operating within this model, Leighley and Nagler argue that when citizens are offered distinctive choices on public policies, they are more likely to vote because they understand those policy choices as a substantial benefit of voting (Leighley and Nagler 2014).

Other benefits, such as feeling a sense of accomplishment for conducting a civic duty or having satisfied a sense of obligation to support a political candidate or organization, cannot be measured so easily. Applying this model to my research question, I might categorize automatic voter registration policies as a benefit. To a citizen who may not have been able to vote in previous elections due to difficulties associated with voter registration, automatic voter registration policies just might tip the scales to allow the benefits of voting to outweigh the costs, given the decrease of the latter with registration no longer an active responsibility belonging to



the citizen. It must be noted, however, that a citizen who was not necessarily motivated to vote for reasons other than the challenges of pre-AVR voter registration policies would likely not consider automatic voter registration a benefit in a cost-benefit calculation.

Furthermore, there may be limitations to understanding voter turnout through the lens of this model. A cost-benefit analysis of whether to vote is more likely to occur on the individual scale and may not be able to account for voting behavior on a grander scale. Indeed, there may be instances in which this calculation serves as an internal or informal evaluation that would be hard to quantify and then apply to large, diverse groups, which is essential to my research. Nevertheless, this framework is widespread among literature on voter turnout, and by applying my research topic to it, I can better see the positive connection between automatic voter registration and those who are motivated to vote.

I will now provide information on other theories that attempt to predict the behavior of voters before combining these theories in a way that is relevant to my analysis. To begin, another theory of voting behavior, developed by Wolfinger and Rosenstone, emphasizes the influence of education on measures of voter turnout. Yet education need not be equated with educational attainment, as the authors claim that after some time, life experience can serve an equivalent role to a formalized education in determining patterns of voter turnout. This theory is supported by findings that the difference in voter turnout between those who have obtained a college degree and those who have not narrows a great deal with age (Wolfinger and Rosenstone 1980). Furthermore, a theory on voter turnout developed by Wattenberg is centered on the availability of information and the role such information plays in conveying the benefits of voting to a prospective voter. According to Wattenberg, a positive relationship exists between availability of information and voter turnout. Thus, under Wattenberg's model, if a prospective voter has more

information on an issue, he or she is more likely to find it advantageous to vote on that issue.

Interestingly, Wattenberg shows that young people are less likely to retain information that might have impacted their voting behavior, despite widespread and growing access to information.

Going further, Wattenberg connects the lack of television news coverage and newspaper news coverage consumed by young people as well as their dwindling knowledge of public affairs to young people not caring about which candidates are elected to office. Based on this, we have a rigorous explanation for low turnout rates among young people, since people vote when they are invested in the outcome of the winner (Wattenberg 2020).

Combining the logic provided by Wattenberg as well as Wolfinger and Rosenstone in their frameworks for voting behavior provides a robust foundation for a hypothesis I will develop. Wolfinger and Rosenstone, in citing life experience as a strong predictor for voter turnout, imply that voters in older age groups often demonstrate strong levels of turnout. We can see this in that the authors denote education as a strong predictor of turnout and then share that the difference in turnout among college-educated and non-college-educated voters diminishes with age (Wolfinger and Rosenstone 1980). According to Wolfinger and Rosenstone's logic, college-educated voters would have among the highest rates of turnout, so if older, non-college-educated voters have turnout rates approaching those of older, college-educated-voters, then older voters generally must demonstrate high levels of voter turnout. To accompany this interpretation is support I find from Wattenberg's analysis. Since Wattenberg connects low availability of relevant information to low turnout among younger voters, he can ostensibly connect the high availability of relevant information to high turnout among older voters. Indeed, the Media Insight Project at the American Press Institute confirms that older Americans have a high consumption of and appreciation for news coverage from television and newspapers relative

to younger Americans. Using Wattenberg's framework, we can link this behavior to older people caring more about which candidates are elected to office, and we can also predict higher turnout rates among older Americans when compared to younger Americans. Thus, by combining two theories of voter turnout, we can confidently predict higher turnout rates among older Americans, which is validated by an analysis of voter turnout by age conducted by the U.S. Election Project showing voters older than 60 to have the highest turnout for every election since 1986. As an aside, the U.S. Election Project is an information source for the nation's electoral system that provides election statistics, electoral laws, and research reports. Nevertheless, we can use this insight to predict how AVR policies may impact turnout by age, which will be outlined in the hypothesis section.

Given the development above of theories pertaining to how turnout manifests when controlling for age, we might also examine literature dealing with how turnout manifests when controlling for race so that we are prepared to make predictions about how AVR policies may impact turnout across that variable. I will start my examination with Leighley and Nagler, who follow and dissect turnout rates from 1972 to 2008 among white, black, Hispanic, and other voters who do not identify with the racial and ethnic categories just mentioned. The pair find "substantial differences" in relative turnout by race over time (Leighley and Nagler 2014). They find that black turnout lagged behind white turnout in the 1970s but equaled white turnout in 2008. Though the fact that white turnout and black turnout were equivalent in 2008 has been heavily discussed in connection with Barack Obama's candidacy for president that year, the trend of increasing turnout of black voters relative to turnout of white voters is apparent outside such significant elections as 2008 and 1984, the latter date being connected to Jesse Jackson's candidacy for president. The trend of increasing turnout of black voters relative to white voters

holds for elections past 2008, according to an analysis of voter turnout by race conducted by the U.S. Election Project. This analysis reveals that black turnout has remained neck and neck with white turnout in elections after 2008. We can use the insight that black and white turnout rates have remained relatively high compared to that of other racial groups and that there has been little difference in turnout rates between the two racial groups for the past few elections to predict how AVR policies may impact black and white turnout, which will be outlined in the hypothesis section.

Turnout among other racial groups must also be considered, so I will continue my examination of the work done by Leighley and Nagler. Their findings indicate that while Hispanic turnout has increased from 1972 to 2008, it has increased much less than black turnout. This trend of increasing but low Hispanic turnout holds for elections past 2008, according to an analysis of voter turnout by race conducted by the U.S. Election Project. Indeed, rates of Hispanic turnout have remained the lowest when compared to rates of turnout among other major racial or ethnic groups. As Leighley and Nagler note, given the increase in the Hispanic voter-eligible population and the “greater organization” of Hispanic political groups since 1972, the size of the gap between rates of Hispanic turnout and rates of turnout among other major racial or ethnic groups is quite striking (Leighley and Nagler 2014). Again, we can use the insight that Hispanic turnout has remained relatively low compared to that of other racial groups and that rates of Hispanic turnout have increased but little over time to predict how AVR policies may impact Hispanic turnout if necessary.

Because Leighley and Nagler do not explicitly address turnout rates of Asian-Americans in their analysis and in fact only analyze turnout rates of white, black, Hispanic and so-called “other” racial and ethnic groups, I must look to other sources to gain insights that will allow me

better understand the effect of AVR policies on turnout of Asian-American voters. One evaluation of Asian-American turnout finds that immigration status and length of residency represent primary barriers for Asian-Americans and, to a lesser extent, Hispanics, in registering to vote but not necessarily in vote-casting, and from her counterfactual analyses the author suggests that differences in voter turnout between Asian Americans and whites would all but disappear if the necessity of voter registration was removed from the picture entirely (Xu 2005).

Unfortunately, we cannot merge Wolfinger and Rosenstone's finding that education is a strong predictor of voter turnout with Xu's analysis, since Xu demonstrates in her research that education as a positive predictor of voter turnout has limited resonance when applied to turnout rates of Asian-Americans, especially when compared to turnout rates of whites (Xu 2005).

Otherwise, we might have been able to construct a thoughtful prediction for the effect of AVR policies on Asian-American voter turnout on the basis of linkage of that group to high levels of education, a phenomena that has been examined widely for decades (see Hirschman and Wong 1986). However, Xu's analysis provides a few key points that I can use to assess how AVR policies may impact Asian-American turnout, including her citation of the registration difficulties faced primarily by Asian-Americans, such as immigration status and length of residency, which notably cannot be overcome simply given the implementation of automatic voter registration policies, as AVR policies do not fundamentally alter the considerations under which voter registration applications are accepted.

Now, I must revisit scholarship on voter registration and voter turnout in order to isolate theories that will enable me to make meaningful predictions about the effects of automatic voter registration policies on registrations as well as the effects of automatic voter registration policies on turnout. Much referenced in this thesis already, I can first return to McGhee and Romero's

analysis of the impact of AVR policies on voter registrations, which finds that automatic voter registration seems to cause a “modest increase” in registration in most of the states that have adopted AVR (McGhee and Romero 2019). Since a significant portion of my methodology mirrors the methodology of McGhee and Romero, I might expect similar findings.

Furthermore, this piece of literature provides a helpful glimpse into how we might logically connect the type of AVR policy to changes in voter registration. McGhee and Romero note that AVR policies that change the default option may encourage greater voter registration than AVR policies that force a choice, given how the former option makes it more complicated to avoid registration. Similarly, a default option associated with back-end AVR should increase registration to a greater extent than a default option associated with front-end AVR, since back-end AVR requires residents to go to the trouble of receiving and replying to a mailed letter should they wish to opt out of AVR (McGhee and Romero 2019).

It appears McGhee and Romero are forming their claims based on a behavioral science theory: regardless of their preferences, individuals often accept the status quo and attempt to avoid even simple behaviors that may alter the status quo, even if those behaviors are ultimately in their long-term benefit, or at least in their perception of their long-term benefit (Thaler and Sunstein 2008). The realization that the default option, which McGhee and Romero associate with the greatest number of registrations, is most common among AVR policies lends further weight to McGhee and Romero’s findings that automatic voter registration seems to cause a small increase in registration- and has implications for my own findings. While McGhee and Romero speculate on the relative efficacy of all iterations of AVR policies using the behavioral science theory above, popularized by Thaler and Sunstein, I find I can more simply apply this framework for understanding behavior to get at how automatic voter registration might affect

registrations. If automatic voter registration should become the status quo, the psychological motivation for individuals to accept that fact will cause a significant increase in registrations as a result of automatic voter registration policies.

Finally, I must utilize existing literature on voter turnout as impacted by electoral reforms in order to synthesize a theory that will allow me to thoughtfully predict the effects of automatic voter registration policies on voter turnout. Previously in this thesis, I highlighted instances in the discipline wherein political scientists could not agree on the impact of various electoral policies on voter turnout. Scholars such as Stockemer, Gronke, Burden, Knack, Brown, Weddeking and others demonstrate that for many electoral reforms, including motor-voter and early in-person voting, findings regarding their impact on voter turnout can prove diametrically opposed. In other words, there is no particular trend that can predict how motor-voter or early in-person voting, among other electoral policy innovations, may affect voter turnout. This is a difficult realization for political scientists and policy analysts to come to, since these electoral reforms are united in their goal to increase voter turnout, particularly among vulnerable or underrepresented populations.

While all electoral reforms may be adopted with the hope of increasing voter turnout, they do not all function similarly. Reforms such as absentee voting and early in-person voting can be categorized as convenience voting measures, for example. Furthermore, not all electoral reforms attempt to increase voter turnout through the medium of voter registration. Registration policies, including automatic voter registration, Election Day or same-day registration, and online voter registration, do in fact seek to affect voter turnout through voter registration.

What might happen if I isolate the findings of analyses of registration policies for review, as opposed to the findings of analyses of electoral policy reforms more broadly? As previously

discussed, several scholars have found that same-day registration yields a positive effect on voter turnout (Fenster 1994; Burden et al 2014; Leighley and Nagler 2014). In addition, a scholar found that another registration policy, online voter registration, also yields a positive effect on voter turnout. Specifically, the author's difference-in-difference analysis indicates that states' implementation of online voter registration increased turnout among young voters by about three percent during presidential election years. Furthermore, the author's instrumental variable analysis shows that utilization of online voter registration increases voter turnout by about 18 to 20 percent (Yu 2019). Yes, electoral policy reforms can have disparate effects on voter turnout, especially when convenience voting reforms and registration reforms are surveyed in tandem. However, my comparison of literature only on registration reforms indicates that such reforms, a category that includes AVR, tend to have a positive effect on voter turnout, an important finding for the construction of my hypothesis on the impact of automatic voter registration policies on voter turnout.

Ultimately, I can combine this finding with another conception of voter turnout theory to demonstrate the validity of my forthcoming prediction regarding the impact of AVR policies on voter turnout. Wolfinger and Rosenstone, in their landmark voter analysis, determine that "the more time and energy required to vote, the lower the possibility that an individual will vote" (Wolfinger and Rosenstone 1980). The implication of this finding, which mirrors the cost-benefit analysis framework discussed at the beginning of the section, is that when the costs associated with voting decrease, voter turnout will increase. Voter registration can be a burdensome process, and if it resembles a cost associated with voting in the eyes of a citizen, it can impact whether the citizen ultimately votes. However, if costs associated with registration can be decreased through policy interventions such as automatic voter registration, citizens are more



likely to vote with all else held equal. Thus, given that registration is a nonnegotiable precursor to vote casting and that registration can be a demanding process, automatic voter registration policies that lessen the demanding nature of the registration can inspire turnout to the extent that registration and voting cannot be separated.

## Hypotheses

In the section above, I bring together a good deal of relevant literature, especially on theories of voter turnout, that subsequently provide compelling justifications for each specific hypothesis listed below. In this section, I state each hypothesis that guides my research design and provide an abbreviated version of the analysis above to illustrate why the predictions below are rigorous, in some cases furthering the analysis above in the space below as needed to account for the specific language of the hypothesis.

*H1: Automatic voter registration policies will have a positive effect on overall voter turnout.*

If we examine studies of registration policies and their subsequent impact on voter turnout, in particular studies of same-day voter registration and online voter registration policies, we find that registration policies tend to have a positive effect on voter turnout. Since automatic voter registration falls under the umbrella of registration policies, it is not unreasonable to predict that AVR policies will impact overall voter turnout in a similarly positive fashion. Furthermore, Wolfinger and Rosenstone, in a well-known study of voter trends, theorize that “the more time and energy required to vote, the lower the possibility that an individual will vote” (Wolfinger and Rosenstone 1980). We might even consider this theory a cost-benefit analysis framework to describe voter turnout, which was discussed toward the beginning of the previous section. Nevertheless, it follows from this theory that when costs connecting to voting are minimized,

voter turnout is maximized. Thus, if we consider voter registration a cost of voting and AVR a measure that minimizes the cost, we may then see an increase in voter turnout if other factors related to voter turnout remain steady.

*H2: Automatic voter registration policies will have a positive effect on overall voter registrations.*

This hypothesis is supported by McGhee and Romero's study of the impact of AVR policies on voter registrations, which finds that automatic voter registration seems to cause a "modest increase" in registration in a majority of the states that have implemented AVR (McGhee and Romero 2019). Since my methodology is similar to the methodology used by McGhee and Romero, I expect similar findings. In addition, this hypothesis considers the theory that regardless of their personal preferences, individuals often accept the status quo and avoid even simple behaviors that may alter the status quo, even if those behaviors are in their benefit in the long-term (Thaler and Sunstein 2008). I can apply this framework to support my hypothesis. Case in point, if automatic voter registration should become the status quo, individuals will accept that fact, thus causing a significant increase in registrations as a result of automatic voter registration policies.

However, that is a far-off possibility, while McGhee and Romero apply this theory in the short-term. Indeed, McGhee and Romero harness the notion that humans are loath to disrupt the status quo to predict that default option AVR policies, particularly those associated with back-end AVR, will likely increase registration to a greater extent than other AVR policies (McGhee and Romero 2019). This is because default option and back-end AVR policies make it more difficult to avoid voter registration. That the default option is most common among current AVR policies lends further weight to McGhee and Romero's findings that automatic voter registration

seems to cause a small increase in registration. The implications for my own findings are that I, too, may discover a positive effect of AVR policies on registrations.

*H3: Automatic voter registration policies will not have a positive effect on voter turnout among older voters.*

A significant theory of voting behavior developed by Wolfinger and Rosenstone cites education or life experience as an important predictor of voter turnout (Wolfinger and Rosenstone 1980). Another theory of voting behavior developed by Wattenberg focuses on information availability, particularly information relating to the news and public affairs, as a significant predictor of voter turnout. He specifically connects the lack of television and newspaper news consumed by young people as well as their dwindling knowledge of public affairs to young people not caring about which candidates are elected to office, thus helping to explain low turnout rates among young people, since people vote when they are invested in the outcome of the winner (Wattenberg 2020).

Wolfinger and Rosenstone, in citing life experience as a strong predictor for voter turnout, imply that voters in older age groups often demonstrate strong levels of turnout (Wolfinger and Rosenstone 1980). Accompanying this interpretation is support from Wattenberg's analysis. Wattenberg links low availability of relevant information to low turnout among younger voters, so he can ostensibly connect high availability of relevant information to high turnout among older voters (Wattenberg 2020). Thus, by combining two theories of voter turnout, we can confidently use age to predict turnout, with higher turnout rates seen among older Americans, validated by the U.S. Election Project's analysis showing voters older than 60 to have the highest turnout for every election since 1986.

We can also use these findings to predict how AVR policies may impact turnout by age. Since older citizens already vote at such high levels, it stands to reason that most of them are registered to vote with valid registration information, since voting is dependent upon accurate registration. Thus, a policy meant to drive registrations and subsequently turnout will not have a positive effect on voting behavior for a subset of the population with turnout levels that cannot get substantially higher.

*H4: Automatic voter registration policies will not have a positive effect on voter turnout among white voters.*

*H5: Automatic voter registration policies will not have a positive effect on voter turnout among black voters.*

These hypotheses were developed from literature that examines how turnout manifests when controlling for race. Leighley and Nagler scrutinize turnout rates by race from 1972 to 2008 and discover a trend of increasing turnout of black voters relative to turnout of white voters (Leighley and Nagler 2014). This trend applies to elections past 2008, according to an analysis conducted by the U.S. Election Project, which reveals that black turnout has remained neck and neck with white turnout in elections after 2008. We can use the fact that black and white turnout has remained relatively high compared to that of other racial groups and that there has been little difference in turnout rates between the two groups for the past few elections to predict how AVR policies may impact black and white turnout, and my logic reflects the defense of H3. Since black and white citizens already vote at relatively high levels, it is likely that many of them are registered to vote with correct registration information, since voting is dependent upon valid registration. Thus, a policy meant to drive registrations and subsequently turnout will likely not

have a positive effect on voting behavior for groups of the population with already high levels of turnout.

Thus, I will not return to my hypotheses until I can compare them to the results of my model. For those wondering why I did not choose to make a hypothesis predicting the effects of AVR policies on turnout of younger voters, turnout of Asian-American voters, or turnout of Hispanic voters, I will explain these exclusions now. In the previous section, one of the theories connected to my examination of how we might predict turnout of young voters greatly emphasized information availability as a predictor of turnout. Furthermore, the theory posits that limited knowledge of public affairs and limited news consumption from newspapers and television result in young people not caring about who is elected and thus not turning out to vote in high numbers (Wattenberg 2020). However, data from the 2018 Current Population Survey's Voting and Registration Supplement reveals that among 18- to 29-year-olds, voter turnout increased from 20 percent in 2014 to 36 percent in 2018, which was the largest percentage point increase for any age group. This challenges the connection drawn by Wattenberg between relevant information availability and turnout, and it also suggests the high potential for interference with my findings, given that my analysis of turnout of young voters would include an election cycle that sparked a massive divergence from those voters' typical turnout patterns. Thus, I decided to narrow the focus of my quantitative efforts on other demographic groups.

Also in the previous section was a discussion of Asian-American electoral participation, which revealed that issues with registration for Asian-Americans and Hispanics such as immigration status and length of residency in the U.S. could not be mediated by AVR (Xu 2005). Given this and the fact that the theory of education as a predictor of turnout could not be applied to Asian-Americans, I found it difficult to devise an appropriate hypothesis for each of these

demographic groups. Again, I therefore decided to narrow the focus of my quantitative efforts on other demographic groups.

## **Research Design**

In this section, I again describe the parameters of AVR as they relate to my analysis, noting which states have implemented AVR policies and when they have done so, thus allowing me to set up my approach appropriately. I also provide a recap of the difference-in-difference models I intend to employ in order to determine causal relationships between AVR policies and the specific measures of voter turnout and voter registration I specify in my hypotheses. Then, I describe the three data sources I use for this analysis, including the Current Population Survey, the Election Administration and Voting Survey, and data from the National Conference on State Legislatures. I also, after providing context on how the first two data sources were compiled, indicate how each of the three data sources are used in my analysis and address strengths and weaknesses of each data source. I provide a preview of the difference-in-difference tests to be run, and lastly, give a final few thoughts on my research design.

For the purposes of this analysis, I will again share my conception of automatic voter registration policies. I consider any state with a policy to automatically add or update voter registrations through a state-designated agency an AVR state, regardless if the state's automatic voter registration policy reflects default option, forced choice, front-end, or back-end characteristics. This definition works because the end result of automatically updated voter registration rolls is the same, regardless of how the AVR policy is specifically implemented. Given this definition, I identify Georgia and Oregon as having implemented automatic voter registration in time to see an effect on turnout for the 2016 election, while I identify Alaska, California, Colorado, Connecticut, the District of Columbia, Illinois, New Jersey, New Mexico,

Rhode Island, and Vermont as having implemented automatic voter registration in time to see an effect on turnout for the 2018 election.

As discussed in an earlier section, I adopt a difference-in-difference approach to model my findings. The approach compares change in turnout by age, race, and state partisanship for the states adopting AVR to change in turnout by age, race, and state partisanship for the states that did not adopt AVR, allowing me to test H1, H3, H4, and H5. The difference between the differences reflects the impact of the automatic voter registration policy on voter turnout provided that other factors affecting voter turnout have remained constant. I also use the difference-in-difference approach to compare change in registration for the states adopting automatic voter registration to change in registration for the states that did not adopt AVR, allowing me to test H2.

The data comes from several sources, the first being the Voting and Registration Supplements from the Current Population Survey (CPS), administered by the Census Bureau. The Voting and Registration Supplement is administered during election years and provides demographic information on those who did and did not register to vote. The survey also measures the number of individuals who voted. In general, the CPS data are collected from individuals, which means there is a potential for item non-response, though statistical packages can supplement missing data when necessary (McGhee and Romero 2019).

The CPS has an impressive average response rate of 90 percent, which comprises about 18 percent of the sample. I examine data from the 2012, 2014, 2016, and 2018 supplements for this analysis. From the CPS, I am able to compute a measure of voter turnout equal to the proportion of the citizen voting age population, or CVAP, in each state that votes during an election. I also use the CPS data to measure turnout in each state across lines of race and age.

Finally, I use the CPS data to measure registration rates as the proportion of the citizen voting age population in each state that is registered to vote. In measuring turnout as a function of race using the CPS data, I limit my analysis to the racial categories of ‘Asian alone,’ ‘Black alone,’ ‘Hispanic (any race),’ and ‘White alone’ both for ease of analysis and as a nod to the idea that the term ‘Hispanic’ represents not a race but an ethnicity. In measuring turnout as a function of age using the CPS data, I limit my analysis to the ‘Age 18-24,’ ‘Age 25-34,’ ‘Age 45-64,’ and ‘Age 65+’ categories. By removing the ‘Age 35-44’ category from my analysis, those examining my results can collapse the first two and second two categories and make generalizations about younger and older voters, with younger voters those 18 to 34 years of age and older voters those 45 to 65+ years of age.

Another data source used is the Election Administration and Voting Survey (EAVS), administered every election year by the U.S. Election Assistance Commission. The survey collects national, state, and county-level data on voter registration and participation; uniformed and overseas voters; early, absentee, and provisional voting; and poll workers, polling places, and precincts. The data found in the EAVS are compiled by state election officials, who utilize centralized voter registration databases and voter history databases in order to respond to the survey questions at the local level. Some state election officials cooperate with county election offices to complete the survey, however.

I examine data from the 2012, 2014, 2016, and 2018 EAVS for this analysis. From the EAVS, I am able to compute a measure of voter turnout equal to the proportion of the CVAP in each state that votes during an election. I use EAVS data to measure registration rates as the proportion of the citizen voting age population in each state that is registered to vote. The figure of turnout, generated from the EAVS data, is quite accurate given that measures of voter



participation come straight from the state. However, the figure of registration, generated from the EAVS data, can be troublesome for my analysis because states that do not update voter registration rolls as necessary can report inflated registration numbers. As a result, the proportion of registered voters as a function of the CVAP exceeds 1 for some states when EAVS data was used.

A final source of data used is the National Conference of State Legislatures, from which I aggregate data on state control. State control is achieved when the same party holds both legislative chambers and the governorship, but if any of those three houses of power are held by another party, state control is split (“State Partisan Composition”). The NCSL provides figures of control by party for the legislative chambers and governorship of each state for the years since 1978. I synthesized these figures to determine, for the years 2012, 2014, 2016, and 2018, the states wherein Democrats had control, the states wherein Republicans had control, and the states wherein control was split according to the logic of state control outlined above. These findings are denoted in Figure 1. Then, for the difference-in-difference analyses of the impact of AVR on turnout and registration, the EAVS data can be used to measure turnout and registration across states while controlling for partisan control.

I want to note that my methodology, including the way my results will be portrayed, is adopted from the methodology used by Leighley and Nagler to analyze the effect on turnout of Election Day registration (see Leighley and Nagler 2014). I first conduct several difference-in-difference tests to determine how AVR impacts the two states that first adopted the policy. These states are Georgia and Oregon and will be referred to as wave 1 states, as they were the first states to implement AVR and did so in time for the 2016 election. Wave 2 states, which are Alaska, California, Colorado, Connecticut, the District of Columbia, Illinois, New Jersey, New

Mexico, Rhode Island, and Vermont, are examined separately so that the estimates of effects are not contaminated, given differences in the time the policy was implemented. Wave 2 states are the states that were next to implement AVR, doing so in time for the 2018 election. If AVR does in fact raise turnout, then I should see a larger increase in turnout from pre-AVR adoption (i.e., 2012) to post-AVR adoption (i.e., 2016) for the two states that implemented the policy just before the 2016 election than for the states that did not adopt AVR. Ultimately, this process is repeated to assess the effects of AVR on turnout for wave 2 states, to assess the effects of AVR on registration for wave 1 states, and to assess the effects of AVR on registration for wave 2 states.

I have a few final comments related to the research design. The use of the citizen voting age population as the denominator when determining rates of turnout and registration is multifold. The CVAP is used as the denominator in both the EAVS and the CPS data, allowing me to standardize my findings, to an extent. The measure has no missing values, and it also serves as a worthwhile proxy for voter-eligible population figures, since the latter can be difficult to calculate, according to the U.S. Election Project. Lastly, North Dakota is limited from the following analyses because the state does not require voter registrations, but the District of Columbia, which implemented AVR during wave 2, is included in these analyses despite not technically being a state.

**Figure 1: State Control Over Time**

State	2012	2014	2016	2018	State	2012	2014	2016	2018
AL	R	R	R	R	MO	S	S	S	R
AK	S	R	S	S	MT	S	S	S	S
AZ	R	R	R	R	NE	R	R	R	S
AR	D	S	R	R	NV	S	R	R	S
CA	D	D	D	D	NH	S	S	S	R
CO	S	D	S	S	NJ	S	S	S	D
CT	D	D	D	S	NM	S	S	S	S
DE	D	D	D	D	NY	S	D	S	D
DC	D	D	D	D	NC	S	R	R	S
FL	R	R	R	R	OH	R	R	R	R
GA	R	R	R	R	OK	R	R	R	R
HI	D	D	D	D	OR	D	D	D	D
ID	R	R	R	R	PA	R	R	S	S
IL	D	D	S	S	RI	S	D	D	D
IN	R	R	R	R	SC	R	R	R	R
IA	S	S	S	R	SD	R	R	R	R
KS	R	R	R	R	TN	R	R	R	R
KY	S	S	S	R	TX	R	R	R	R
LA	R	R	R	S	UT	R	R	R	R
ME	R	S	S	S	VT	D	D	D	S
MD	D	D	S	S	VA	S	S	S	S
MA	D	D	S	S	WA	D	D	S	D
MI	R	R	R	R	WV	D	D	S	R
MN	S	D	S	S	WI	R	R	R	R
MS	R	R	R	R	WY	R	R	R	R

Notes: This figure was created using data from the National Conference of State Legislatures.

## Results

### The Effect of the Adoption of Automatic Voter Registration on Turnout

#### (Wave 1 AVR States)

Table 1 shows voter turnout for two groups of states, namely the AVR Wave 1 states (Georgia and Oregon) and the non-AVR states, for the 2012 and 2016 elections. If AVR is effective, we should note higher increases in the column of increases in turnout for AVR states than in the column of increases in turnout for non-AVR states, and we do in fact see this. From the EAVS data, it is clear that since the implementation of AVR, the Wave 1 states have had turnout on average 4.8 percentage points higher than their pre-AVR turnout, while turnout in the non-AVR states has increased only 3.0 percentage points over the same period of time. From the EAVS data, we can determine that the net effect on overall turnout that can be attributed to AVR here is a 1.8 percentage point increase in turnout. From the CPS data, it seems that since the implementation of AVR, the Wave 1 states have had turnout on average 4.2 percentage points higher than pre-AVR turnout, while turnout in non-AVR states increased only 3.3 percentage points over the same period of time. From the CPS data, we can determine that the net effect on overall turnout that can be attributed to AVR here is a .9 percentage point increase in turnout. Thus, we can conclude from Table 1 that AVR has a small, positive impact on turnout, since it increased overall turnout by 1.8 percentage points from my synthesis of the EAVS data and it increased overall turnout by .9 percentage points from my synthesis of the CPS data.

Now that we have concluded that AVR has a small impact on raising overall turnout, we might now consider who exactly is voting more due to AVR. In order to answer this question, we measure turnout of different racial and age groups for each state in the pre-AVR (i.e., 2012) and post-AVR (i.e., 2016) elections, which are found within the CPS data, before repeating the

difference-in-difference analysis used to capture the effect of AVR on overall turnout. Referring to Table 1, we do not observe a positive effect on turnout for white, black, or Asian voters as a result of AVR. We do see, however, that AVR increased turnout by about 4.1 percentage points among Hispanic voters. Among age groups, it should be noted that AVR did not increase turnout among young voters, namely voters of ages 18 to 34. However, AVR increased turnout by .4 percentage points among voters of ages 65 and over. As an aside, it is important to remember that the results in the second-to-last column of Table 1 are about groups of individuals and are not inferences about individual citizens. In other words, we cannot use the findings from this column to make claims about how an individual belonging to a certain subset of the population is likely to vote in comparison to an individual belonging to another subset (see Leighley and Nagler 2014).

Continuing to analyze the results of Table 1, we can see that in Republican-controlled states, AVR does not have a positive impact on turnout. However, AVR increased turnout in Democrat-controlled states by approximately 11.3 percentage points. It may be prudent to exclude from consideration the findings of how AVR impacted turnout in states where control was split among parties, since no Wave I AVR states were split-control states for the time period in question.

Before AVR is introduced in states, we can consider those who are nonvoters to be the people at risk of being converted to voters via the treatment of AVR. The last column of Table 1 considers the effect of AVR on the at-risk population, or individuals who could be converted to voters, within any group. The findings in this column give the increased likelihood that a single nonvoter would become a voter based on adoption of AVR, and these estimates provide the most

direct evidence regarding individual differences in the effects of electoral reforms across demographic subgroups (see Leighley and Nagler 2014).

Let us consider aggregate turnout using the EAVS data. In 2012, reported turnout was 60.7 percent in Wave 1 AVR states, so 39.3 percent of citizens were not voting. These citizens are the ones who were at risk to be converted to voters by AVR. Since AVR increased turnout by 1.8 percentage points, the effect on at-risk voters was that 1.8 out of 39.3 were converted to voters by AVR. Therefore, the effect on at-risk voters was 4.6 percent, or 1.8 divided by 39.3. Thus, 4.6 percent of nonvoters were converted to voting via AVR. When the same calculation is repeated using the CPS data, we see that 2.2 percent of nonvoters were converted to voting via AVR (see Leighley and Nagler 2014). The individual at-risk effects for each subgroup examined in this analysis are given in the last column of Table 1. From this, we can see that individual Hispanics were more likely to take advantage of AVR than individuals in other racial groups. We can also see that individuals of ages 65 and up were more likely to take advantage of AVR than individuals in other age groups. Furthermore, individuals in Democrat-controlled states were more likely to take advantage of AVR than individuals in Republican-controlled states. In general, we care about the net group effect to understand the effect of AVR on the overall voting behavior of subsets of the population. However, if we want to look into individual behavior, the at-risk effect is what we should look at.

**Table 1: The Effect of the Adoption of Automatic Voter Registration on Turnout (Wave 1 AVR States)**

	AVR Wave 1 States			Non-AVR States			Net AVR Group Effect	At-Individual risk Effect
	2012	2016	Increase, 2012 to 2016	2012	2016	Increase, 2012 to 2016		
Aggregate EAVS	60.7	65.5	4.8	59.4	62.4	3.0	1.8	4.6%
Aggregate CPS	59.1	63.3	4.2	59.1	62.4	3.3	0.9	2.2%
Race: White	65.2	65.2	0	63.7	64.0	0.3	-0.3	-0.9%
Race: Black	65.0	59.7	-5.3	64.3	59.5	-4.8	-0.5	-1.4%
Race: Hispanic	48.9	51.4	2.5	49.9	48.3	-1.6	4.1	8.0%
Race: Asian	41.9	31.3	-10.6	48.0	50.9	2.9	-13.5	-23.2%
Age: 18-24	45.7	46.2	0.5	41.6	43.2	1.6	-1.1	-2.0%
Age: 25-34	57.5	54.5	-3.0	53.7	53.7	0	-3.0	-7.1%
Age: 45-64	71.1	67.2	-3.9	68.9	67.4	-1.5	-2.4	-8.3%
Age: 65+	75.0	73.6	-1.4	73.8	72	-1.8	0.4	1.6%
State Control: Republican	56.9	59.4	2.5	57.2	60.3	3.1	-0.6	-1.4%
Democrat	64.5	71.5	7.0	57.8	60.8	3.0	4.0	11.3%
Split	0	0	0	62.9	66.1	3.2	-3.2	-3.2%

Notes: The first and last three rows were computed using data from the 2012 and 2016 Election and Administration Voting Surveys, and all other rows were computed using data from the November 2012 and 2016 Current Population Surveys. The wave 1 AVR states are Georgia and Oregon. Net AVR Group Effect entries are the post-2012 change in turnout for the two wave 1 AVR states minus the post-2012 change in turnout for the non-AVR states.

At-Individual risk Effect entries are the percentage of nonvoters converted to voters based on the net effect of AVR. See the text for a discussion of at-risk effects.

## **The Effect of the Adoption of Automatic Voter Registration on Turnout (Wave 2 AVR States)**

Now we analyze the next wave of AVR adoption. Table 2 shows voter turnout for the AVR Wave 2 states (Alaska, California, Colorado, Connecticut, the District of Columbia, Illinois, New Jersey, New Mexico, Rhode Island, and Vermont) and the non-AVR states for the 2014 and 2018 elections. This Wave 2 analysis, like the Wave 1 analysis described above, shows that AVR has a small, positive impact on turnout, since it increased overall turnout by .9 percentage points from my synthesis of the EAVS data and it increased overall turnout by .6 percentage points from my synthesis of the CPS data.

Having once more concluded that AVR has a small impact on raising overall turnout, we might again consider who exactly is voting more due to AVR. Referring to Table 2, we once again do not observe a positive effect on turnout for white or black voters as a result of AVR. We do see, however, that AVR increased turnout by about 7.8 percentage points among Asian-American voters, which contrasts from the previous analysis wherein a positive effect on turnout for Asian-American voters as a result of AVR was not observed. We also see in Table 2 that AVR did not have a positive impact on turnout of Hispanic voters, despite the previous analysis showing that AVR had a positive effect on turnout for Hispanic voters. Earlier in this thesis, I evaluated literature showing that Asian-American and Hispanic voters face unique barriers to registration and subsequently turnout that cannot be eased by AVR policies (Xu 2005). Given this, I will refrain from attempting to unravel these contradictory findings between the Wave 1 and Wave 2 analyses.

The findings in Table 2 also indicate that AVR did not increase turnout among older voters, namely voters of ages 65 and up. However, AVR increased turnout by 5.9 percentage



points among voters of ages 18 to 24. In addition, we can see that in Democrat-controlled states and split-control states, AVR has a positive impact on turnout. It may once more be prudent to exclude from consideration the findings of how AVR impacted turnout in Republican-controlled states, since no Wave 2 AVR states were Republican-controlled for the time period in question.

The individual at-risk effects for each subgroup examined in this analysis are given in the last column of Table 2. From this, we can see that individual Asian-Americans were more likely to take advantage of AVR than individuals in other racial groups, with 9.9 percent of Asian-American non-voters converted to voting via AVR. We can also see that individuals of ages 18 to 24 were more likely to take advantage of AVR than individuals in other age groups, with 7 percent of 18- to 24-year-old voters converted to voting via AVR. Furthermore, individuals in Democrat-controlled states were more likely to take advantage of AVR than individuals in split-control states, with 4.7 percent of voters in Democrat-controlled states converted to voting via AVR.

**Table 2: The Effect of the Adoption of Automatic Voter Registration on Turnout (Wave 2 AVR States)**

	AVR Wave 2 States			Non-AVR States			Net AVR Group Effect	At-Individual risk Effect
	2014	2018	Increase, 2014 to 2018	2014	2018	Increase, 2014 to 2018		
Aggregate EAVS	41.0	52.7	11.7	40.6	51.4	10.8	0.9	1.5%
Aggregate CPS	43.4	54.0	10.6	43.9	53.9	10.0	0.6	1.1%
Race: White	48.0	56.8	8.8	45.1	55.0	9.9	-1.1	-2.1%
Race: Black	38.3	48.5	10.2	38.9	49.7	10.8	-0.6	-1.0%
Race: Hispanic	31.8	41.6	9.8	25.5	36.9	11.4	-1.6	-2.3%
Race: Asian	21.6	44.4	22.8	28.0	43	15.0	7.8	9.9%
Age: 18-24	15.7	34.9	19.2	18.5	31.8	13.3	5.9	7.0%
Age: 25-34	30.9	42.4	11.5	29.3	41.5	12.2	-0.7	-1.0%
Age: 45-64	55.8	58.7	2.9	51.3	60.4	9.1	-6.2	-14.0%
Age: 65+	61.9	65.7	3.8	61.4	67.3	5.9	-2.1	-5.5%
State Control: Republican	0	0	0	38.5	50.7	12.2	-12.2	-12.2%
Democrat	36.6	49.5	12.9	41.8	51.7	9.9	3.0	4.7%
Split	34.2	46.7	12.5	41.4	53.7	12.3	0.2	0.3%

Notes: The first and last three rows were computed using data from the 2014 and 2018 Election and Administration Voting Surveys, and all other rows were computed using data from the November 2014 and 2018 Current Population Surveys. The wave 2 AVR states are Alaska, California, Colorado, Connecticut, the District of Columbia, Illinois, New Jersey, New Mexico, Rhode Island, and Vermont.

Net AVR Group Effect entries are the post-2014 change in turnout for the wave 2 AVR states minus the post-2014 change in turnout for the non-AVR states.

At-Individual risk Effect entries are the percentage of nonvoters converted to voters based on the net effect of AVR. See the text for a discussion of at-risk effects.

## **The Effect of the Adoption of Automatic Voter Registration on Registrations (Wave 1 AVR States)**

We will now analyze the effect of AVR adoption on voter registration. Table 3 shows voter registration for the AVR Wave 1 states (Georgia and Oregon) and the non-AVR states for the 2012 and 2016 election cycles. This Wave 1 analysis shows that AVR has a modest, positive impact on registration, since it increased overall registration by 3.7 percentage points from my synthesis of the EAVS data, and it increased overall registration by 1.6 percentage points from my synthesis of the CPS data.

The findings in Table 3 indicate that in Democrat-controlled states and Republican-controlled states, AVR has a positive impact on registration. Indeed, it seems as though AVR has a greater effect on registration in Democrat-controlled states than in Republican-controlled states, since AVR increased registration in Democrat-controlled states by 8.4 percentage points and only increased registration in Republican-controlled states by 2 percentage points. Again, it is likely prudent to exclude from our examination the findings of how AVR impacted registration in split-control states, since no Wave 1 AVR states can be categorized as split-control for the time period in question.

Indeed, we may need to disregard the findings relating registration to state control altogether. This is because of how inflated the EAVS data on registration rates is, since many states fail to appropriately update their voter registration rolls and thus report grossly high registration figures. We need not disregard the overall impact of AVR on voter registration as calculated from the EAVS data, since the CPS data similarly concludes there to be modest but positive effects on voter registration via AVR.

**Table 3: The Effect of the Adoption of Automatic Voter Registration on Registration (Wave 1 AVR States)**

	AVR Wave 1 States			Non-AVR States			Net AVR Group Effect	At-Individual risk Effect
	2012	2016	Increase, 2012 to 2016	2012	2016	Increase, 2012 to 2016		
Aggregate EAVS	85.0	92.2	7.2	89.3	92.8	3.5	3.7	24.7%
Aggregate CPS	72.5	73.4	0.9	72.2	71.5	-0.7	1.6	5.8%
State Control: Republican	90.4	95.4	5.0	85.8	88.8	3.0	2.0	20.8%
Democratic	79.6	89.1	9.5	92.7	93.8	1.1	8.4	41.2%
Split	0	0	0	94.5	98.0	3.5	-3.5	-3.5%

Notes: The first and last three rows were computed using data from the 2012 and 2016 Election and Administration Voting Surveys, and all other rows were computed using data from the November 2012 and 2016 Current Population Surveys. The wave 1 AVR states are Georgia and Oregon.

Net AVR Group Effect entries are the post-2012 change in registration for the two wave 1 AVR states minus the post-2012 change in registration for the non-AVR states.

At-Individual risk Effect entries are the percentage of non-registrants converted to registrants based on the net effect of AVR. See the text for a discussion of at-risk effects.

## **The Effect of the Adoption of Automatic Voter Registration on Registrations (Wave 2 AVR States)**

Finally, we discuss the results of the next wave of AVR adoption. Table 4 shows voter registrations for the AVR Wave 2 states (Alaska, California, Colorado, Connecticut, the District of Columbia, Illinois, New Jersey, New Mexico, Rhode Island, and Vermont) and the non-AVR states for the 2014 and 2018 election cycles. This Wave 2 analysis, like the Wave 1 analysis described above, shows that AVR has a small but positive impact on registration, since it increased overall registration by 3.6 percentage points from my synthesis of the EAVS data and it increased overall registration by .5 percentage points from my synthesis of the CPS data.

The findings in Table 4 indicate that in Democrat-controlled states, AVR has a positive impact on registration, with AVR having increased registration in Democrat-controlled states by 9.6 percentage points. Again, we should probably exclude from our examination the findings of how AVR impacted registration in Republican-controlled states, since no Wave 2 AVR states can be categorized as Republican-controlled for the time period in question.

Indeed, we may once more need to disregard the findings relating registration to state control altogether given how inflated the EAVS data on registration rates is. We, once again, do not necessarily need to disregard the overall impact of AVR on voter registration as calculated from the EAVS data, since findings from the CPS data similarly conclude there to be small but positive effects on voter registration via AVR.

**Table 4: The Effect of the Adoption of Automatic Voter Registration on Registration (Wave 2 AVR States)**

	AVR Wave 2 States			Non-AVR States			Net AVR Group Effect	At-Individual risk Effect
	2014	2018	Increase, 2014 to 2018	2014	2018	Increase, 2014 to 2018		
Aggregate EAVS	92.8	99.7	6.9	85.4	88.7	3.3	3.6	50.0%
Aggregate CPS	66.0	68.6	2.6	66.0	68.1	2.1	0.5	1.5%
State Control: Republican	0	0	0	83.7	87.0	3.3	-3.3	-3.3%
Democratic	89.7	105.87	16.2	82.4	89.0	6.6	9.6	92.9%
Split	88.9	84.5	-4.4	88.7	91.5	2.8	-7.2	-64.9%

Notes: The first and last three rows were computed using data from the 2014 and 2018 Election and Administration Voting Surveys, and all other rows were computed using data from the November 2014 and 2018 Current Population Surveys. The wave 2 AVR states are Alaska, California, Colorado, Connecticut, the District of Columbia, Illinois, New Jersey, New Mexico, Rhode Island, and Vermont.

Net AVR Group Effect entries are the post-2014 change in registration for the wave 2 AVR states minus the post-2014 change in registration for the non-AVR states.

At-Individual risk Effect entries are the percentage of non-registrants converted to registrants based on the net effect of AVR. See the text for a discussion of at-risk effects.

## **A Note on Comparing Findings from Distinct Data Sources**

Readers might wonder why I capture trends in overall turnout and registration using two different data sources, namely the CPS and the EAVS. Ultimately, comparing the size and direction of the findings between the two data sources serves as a kind of check. The CPS data is limited by item non-response and incomplete observations when the citizen population base is too small to show a derived measure. The EAVS data on registrations, meanwhile, is limited by overreporting of registrations. One clear example of this is in Table 4, where registration rates for Wave 2 AVR states in 2018 exceeds 100 percent, implying there are more registrations than citizens of voting age. Thus, if I compare the overall findings provided by the two data sources, I am better able to account for individual issues with the CPS data or the EAVS data. Additionally, I can make sure not to understate or overstate the effect of AVR on voter turnout and voter registration, which I might do if relying only on one dataset.

While the EAVS data on turnout is more accurate, since it comes directly from the states, only the CPS data allows for the isolation of voter turnout across distinct demographic variables. Thus, if I want to compare subgroup turnout to overall turnout, I can reduce noise by considering those estimates of subgroup and overall turnout which come from the same data source, in this case the CPS data. However, as noted, the EAVS data can be more accurate in the case of turnout, which is why I insist on using the EAVS data to measure overall effects on turnout as well. Ultimately, using the sources in tandem paints the most accurate picture of how AVR is related to turnout and registration. Thus, I have explained why the overall findings of turnout and registration from two data sources, seen in the first two rows of each table, are compared.

## Discussion

I will begin this section by analyzing whether my hypotheses have been validated by the results. I find support for four of my hypothesis, and I discuss why in this section. I also assess whether the theories that developed my hypotheses hold up given my findings. Then, I will discuss limitations associated with my results and how I attempted to account for them in my methodology. After that, I will apply other aspects of AVR policy to my findings. Namely, I will develop and analyze a theory on the impact of public education campaigns about AVR with respect to my findings. Finally, I examine how my findings may oppose a belief held by some political scientists, which is that electoral reforms are not helpful in decreasing gaps in voter turnout.

*H1: Automatic voter registration policies will have a positive effect on overall voter turnout.*

I find nothing that would cause me to reject this first hypothesis. From my analysis of Wave 1 AVR states when compared to non-AVR states, I find that AVR has a small, positive impact on turnout, since it increased overall turnout by 1.8 percentage points from my synthesis of the EAVS data, and it increased overall turnout by .9 percentage points from my synthesis of the CPS data. From my analysis of Wave 2 AVR states when compared to non-AVR states, I also find that AVR has a small, positive impact on turnout, since it increased overall turnout by .9 percentage points from my synthesis of the EAVS data, and it increased overall turnout by .6 percentage points from my synthesis of the CPS data. In addition, the theoretical framework used to develop this hypothesis seems to hold up within my findings. If you recall, the theory designates voter registration a cost of voting and AVR a measure that minimizes the cost such that we see an increase in voter turnout as a result of AVR, since the benefits of voting are no longer outweighed by the costs, all other things held equal.



*H2: Automatic voter registration policies will have a positive effect on overall voter registrations.*

I also find nothing that would cause me to reject this second hypothesis. From my analysis of Wave 1 AVR states when compared to non-AVR states, I find that AVR has a modest, positive impact on registration, since it increased overall registration by 3.7 percentage points from my synthesis of the EAVS data, and it increased overall registration by 1.6 percentage points from my synthesis of the CPS data. From my analysis of Wave 2 AVR states when compared to non-AVR states, I again find that AVR has a small but positive impact on registration, since it increased overall registration by 3.6 percentage points from my synthesis of the EAVS data and it increased overall registration by .5 percentage points from my synthesis of the CPS data. My findings also validate those of McGhee and Romero, who find that automatic voter registration seems to cause a “modest increase” in registration in a majority of the states that have implemented AVR (McGhee and Romero 2019).

In addition, my findings validate the theory used to develop this hypothesis, the theory being that regardless of their personal preferences, individuals often accept the status quo and avoid even simple behaviors that may alter the status quo, even if those behaviors are in their benefit in the long-term (Thaler and Sunstein 2008). McGhee and Romero posit that this desire to prevent disruptions to the status quo means that when AVR is presented as the default option, individuals will do little to change that (McGhee and Romero 2019). This implies that default option AVR policies will increase registration, a finding I validate, since I found AVR policies to increase registration and the majority of states in this analysis present AVR as the default option.

*H3: Automatic voter registration policies will not have a positive effect on voter turnout among older voters.*

My findings both support and reject this hypothesis. From my analysis of Wave 1 AVR states when compared to non-AVR states, I find that AVR has a small, positive impact on turnout among voters of ages 65 and up, since AVR increased turnout among that group by .4 percentage points. From my analysis of Wave 2 AVR states when compared to non-AVR states, I find, however, that AVR does not have a positive impact on turnout among voters of ages 65 and up. Therefore, I cannot validate the theory behind my prediction within the scope of my study. Again, the theory behind my prediction was this: since older citizens already vote at such high levels, most of them are likely registered to vote with valid registration information, and therefore a policy meant to drive registrations and subsequently turnout will not have a positive effect on voting behavior for a subset of the population with turnout levels that cannot get substantially higher.

*H4: Automatic voter registration policies will not have a positive effect on voter turnout among white voters.*

*H5: Automatic voter registration policies will not have a positive effect on voter turnout among black voters.*

I also find nothing that would cause me to reject this second hypothesis. From my analysis of Wave 1 AVR states when compared to non-AVR states, I find that AVR does not have a positive impact on turnout among white or black voters. From my analysis of Wave 2 AVR states when compared to non-AVR states, I again find that AVR does not have a positive impact on turnout among white or black voters. The theory used to develop this hypothesis was this: since black and white citizens already vote at relatively high levels, it is likely that many of them are registered to vote with correct registration information, and thus a policy meant to drive registrations and subsequently turnout will likely not have a positive effect on voting behavior

for groups of the population with already high levels of turnout. You might notice that this is very similar to the theory behind H3, and while H3 and subsequently that theory could not necessarily be validated, this theory seems to hold up under my findings.

Although many of my hypotheses have been validated by my findings, there are limitations to my results that must be considered. For example, I compare turnout between individual years before and after the implementation of AVR policies. Ideally, political scientists might analyze turnout across long periods of time before and after an electoral reform, instead of analyzing turnout within individual years before and after an electoral reform. This is so that their model accounts for changes in other factors associated with turnout occurring in those individual years that might be correlated to the adoption of the reform (Leighley and Nagler 2014). Unfortunately, EAVS data only covers recent elections, and AVR is itself a recent electoral reform, so my findings are not as rigorous as they might be if I was doing this analysis in 2032 and able to analyze turnout across long periods of time before and after states first implemented AVR policies. Still, I take some steps to account for changes in other factors associated with turnout. Turnout may be impacted by whether it is a midterm or presidential election year, so I only compare turnout amongst presidential election years and amongst midterm election years in my analysis. Thus, despite limitations beyond my control, I make attempts to ensure the validity of my findings.

Additionally, I want to explore how one aspect of AVR policy mentioned briefly in my introduction connects to my findings. Some states, namely Alaska, California, Illinois, New Jersey, and Vermont, explicitly called for campaigns to educate the public on AVR when they enacted AVR policies, according to the Brennan Center for Justice (“Policy Differences of Automatic Voter Registration”). Interestingly, all of these states are classified as Wave 2 AVR

states under my analysis. However, neither of the Wave 1 AVR states decided to implement public education campaigns. If we assume that a public education campaign has a positive affect on turnout and registration, then we might expect AVR policies to impact turnout and registration to a greater extent in the Wave 2 analyses than in the Wave 1 analyses.

Yet this is not the case. The Wave 1 analysis of turnout finds that AVR raises turnout by either 1.8 percentage points or .9 percentage points, using EAVS data and CPS data, respectively. However, the Wave 2 analysis of turnout finds that AVR raises turnout by either .9 percentage points or .6 percentage points. We see that the impact of AVR on turnout was less when the second wave of states adopted AVR than when the first wave of states adopted AVR. Similarly, the Wave 1 analysis of registration finds that AVR raises registration by either 3.7 percentage points or 1.6 percentage points, using EAVS data and CPS data, respectively. Yet the Wave 2 analysis of registration finds that AVR raises registration by either 3.6 percentage points or .5 percentage points. Resembling our findings related to turnout, we find that the impact of AVR on registration was less when the second wave of states adopted AVR than when the first wave of states adopted AVR. Thus, it does not seem very likely that a public education campaign can help account for differences in the impact of AVR on turnout and registration depending on when the AVR policies were implemented.

Lastly, I want to apply my findings to the belief held by some that electoral reforms designed to decrease gaps in voter turnout actually increase gaps in turnout by making voting even easier for groups that already vote in high quantities (see Berinsky 2005). Let us consider Asian-American and Hispanic voters, who have lower turnout rates when compared to other racial and ethnic minority groups. I decided earlier to exclude from my analysis voting behavior of Asian-American and Hispanic voters in connection with AVR, since specific barriers to

registration common for these voters are not necessarily eased by AVR (see Xu 2005). However, I feel it is worth mentioning that the Wave 1 analysis of turnout finds that AVR raises turnout among Hispanic voters by 4.1 percentage points, while the Wave 2 analysis of turnout finds that AVR raises turnout among Asian-American voters by 7.8 percentage points. While the theory that electoral reforms are not helpful in decreasing gaps in voter turnout is compelling, my findings indicate that this is not a given.

## Conclusion

Based on topics associated with AVR mentioned in previous sections of this paper, I will now share possible areas of further analysis inspired by my findings. Let us recall McGhee and Romero's exploration of the different manifestations of AVR policy and the theories they provide on which types of AVR policies will have the greatest impact on registration. They predict that between default option and forced choice AVR policies, default option policies will result in greater registrations. In addition, they predict that default option policies implemented through the back-end will result in greater registrations than default option policies implemented through the front-end (McGhee and Romero 2019). If a research design were developed and implemented to assess these hypotheses, we might be able to figure out which aspects of AVR policies impact voter registration and voter turnout more than others, since we now know from my analysis that automatic voter registration has a small but positive effect on voter registration and voter turnout. Also connected to the notion of identifying which aspects of AVR policy impact voter registration and voter turnout more than others, future research may be worthwhile on whether the impact on registration and turnout differs based on which state agency is involved in AVR.

Though my findings on how state partisan control might alter the effect of AVR on voter registration and turnout were not especially fruitful, this topic of state partisan control is intriguing when we consider it in conjunction with AVR. Electoral reforms can inspire controversy along partisan lines because both Democrats and Republicans assume that increasing turnout among underrepresented groups will benefit Democratic politicians (Berinsky 2005). Thus, we can reasonably assume that electoral reforms such as AVR are more likely to be adopted in Democrat-controlled states as opposed to Republican-controlled or split-control states. Still, if this assumption is tested, it would be a useful addition to our currently limited understanding of factors influencing AVR policies and their implementation.

Lastly, I will address the contributions made by this thesis. As discussed previously, political scientists have distinct theories on whether electoral reforms have positive or negative effects on voter turnout. The existing scholarship indicates a wide variety of findings, even among examinations of the same electoral reform. However, all of the literature I examined that specifically evaluates the effect of registration policy reforms on voter turnout find that registration policy reforms have positive effects on turnout (Fenster 1994; Burden et al 2014; Leighley and Nagler 2014; Yu 2019). My thesis reflects this trend, as I also find that a registration policy reform has a positive effect on voter turnout. Thus, as a result of my analysis, those who study electoral reforms can say with a degree more certainty that among an array of electoral policy innovations, registration policy reforms have a positive impact on voter turnout.

In addition, I am able to contribute to a very limited body of academic work on automatic voter registration policies. Until now, there has been no formal study of how AVR policies actually impact voter turnout. This is understandable, since automatic voter registration policies are new in practice. It was only a short time ago that data on voter behavior, including rates of

registration and turnout, were released for election years in which states first began to implement automatic voter registration policies. Given the limited time frame in which I conduct my investigation into AVR's effect on voter registration and turnout, my findings may be more rigorous if my analysis were repeated in the years to come, as a greater quantity of data reflecting relevant voter registration and voter turnout rates before and after the adoption of AVR policies is made available. Nevertheless, I believe my finding that AVR has a small but positive effect on voter turnout is especially meaningful when we realize that states are at this very moment considering whether to enact automatic voter registration policies, just as motor-voter and the National Voter Registration Act were enacted almost thirty years ago.

## Bibliography

- “Automatic Voter Registration.” *National Conference of State Legislatures*, National Conference of State Legislatures, 22 Apr. 2019, [www.ncsl.org/research/elections-and-campaigns/automatic-voter-registration.aspx](http://www.ncsl.org/research/elections-and-campaigns/automatic-voter-registration.aspx).
- Berinsky, Adam J. “The Perverse Consequences of Electoral Reform in the United States.” *American Politics Research*, vol. 33, no. 4, July 2005, pp. 471–491, doi:10.1177/1532673X04269419.
- Brown, Robert D., and Justin Wedeking. “People Who Have Their Tickets But Do Not Use Them: ‘Motor Voter,’ Registration, and Turnout Revisited.” *American Politics Research* 34, no. 4, Jul. 2006, pp. 479–504. doi:10.1177/1532673X05281122.
- Burden, Barry C., and Jacob R. Neiheisel. “Election Administration and the Pure Effect of Voter Registration on Turnout.” *Political Research Quarterly*, vol. 66, no. 1, Mar. 2013, pp. 77–90, doi:10.1177/1065912911430671.
- Burden, Barry C., et al. “Election Laws, Mobilization, and Turnout: The Unanticipated Consequences of Election Reform.” *American Journal of Political Science*, vol. 58, no. 1, 2014, pp. 95–109. *JSTOR*, [www.jstor.org/stable/24363471](http://www.jstor.org/stable/24363471).
- Chokshi, Niraj. “Automatic Voter Registration a ‘Success’ in Oregon.” *The New York Times*, The New York Times, 2 Dec. 2016, [www.nytimes.com/2016/12/02/us/politics/oregon-voter-registration.html](http://www.nytimes.com/2016/12/02/us/politics/oregon-voter-registration.html).
- Fenster, Mark J. “The Impact of Allowing Day of Registration Voting On Turnout in U.S. Elections From 1960 To 1992: A Research Note.” *American Politics Quarterly*, vol. 22, no. 1, Jan. 1994, pp. 74–87, doi:10.1177/1532673X9402200105.



Gronke, Paul, et al. "Early Voting and Turnout." *PS: Political Science & Politics*, vol. 40, no. 4, 2007, pp. 639–645., doi:10.1017/S1049096507071028.

Hirschman, Charles, and Morrison G. Wong. "The Extraordinary Educational Attainment of Asian-Americans: A Search for Historical Evidence and Explanations." *Social Forces*, vol. 65, no. 1, 1986, pp. 1–27. *JSTOR*, [www.jstor.org/stable/2578933](http://www.jstor.org/stable/2578933).

"How Younger and Older Americans Understand and Interact with News." *The Media Insight Project*, American Press Institute, 10 June 2018, [www.americanpressinstitute.org/publications/reports/survey-research/ages-understand-news/](http://www.americanpressinstitute.org/publications/reports/survey-research/ages-understand-news/).

Knack, Stephen. "Does 'Motor Voter' Work? Evidence from State-Level Data." *The Journal of Politics*, vol. 57, no. 3, 1995, pp. 796–811. *JSTOR*, [www.jstor.org/stable/2960193](http://www.jstor.org/stable/2960193).

Leighley, Jan E., and Jonathan Nagler. *Who Votes Now?: Demographics, Issues, Inequality, and Turnout in the United States*. Princeton University Press, 2014.

McGhee, Eric, and Mindy Romero. "Registration Effects of Automatic Voter Registration in the United States." *Election Sciences, Reform, & Administration Conference*, ESRA 2019, 2019, [cpb-us-w2.wpmucdn.com/web.sas.upenn.edu/dist/7/538/files/2019/07/avr\\_multistate\\_esra.pdf](http://cpb-us-w2.wpmucdn.com/web.sas.upenn.edu/dist/7/538/files/2019/07/avr_multistate_esra.pdf).

"Measuring Motor Voter." *Pew*, The Pew Charitable Trusts, 6 May 2014, [www.pewtrusts.org/en/research-and-analysis/issue-briefs/2014/05/06/measuring-motor-voter-room-for-improvement](http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2014/05/06/measuring-motor-voter-room-for-improvement).

Monogan, James E. *Political Analysis Using R*. Springer, 2015.

Oprysko, Caitlin. "Oregon Governor Calls Automatic Voter Registration a 'Phenomenal Success'." *POLITICO*, 22 Feb. 2019, [www.politico.com/story/2019/02/22/automatic-voter-registration-oregon-1181199](http://www.politico.com/story/2019/02/22/automatic-voter-registration-oregon-1181199).

"Policy Differences of Automatic Voter Registration." *Brennan Center for Justice*, Brennan Center for Justice, 17 Jan. 2020, [www.brennancenter.org/our-work/research-reports/policy-differences-automatic-voter-registration](http://www.brennancenter.org/our-work/research-reports/policy-differences-automatic-voter-registration).

Rakich, Nathaniel. "What Happened When 2.2 Million People Were Automatically Registered To Vote." *FiveThirtyEight*, FiveThirtyEight, 10 Oct. 2019, [fivethirtyeight.com/features/what-happened-when-2-2-million-people-were-automatically-registered-to-vote/](http://fivethirtyeight.com/features/what-happened-when-2-2-million-people-were-automatically-registered-to-vote/).

Springer, Melanie Jean. *How the States Shaped the Nation: American Electoral Institutions and Voter Turnout, 1920-2000*. The University of Chicago Press, 2014.

"State Partisan Composition." *National Conference of State Legislatures*, National Conference of State Legislatures, Feb. 2020, <http://www.ncsl.org/research/about-state-legislatures/partisan-composition.aspx>.

Stockemer, Daniel. "What Affects Voter Turnout? A Review Article/Meta-Analysis of Aggregate Research." *Government and Opposition*, vol. 52, no. 4, 2017, pp. 698-722. *ProQuest*, <https://proxy.library.upenn.edu/login?url=https://search-proquest-com.proxy.library.upenn.edu/docview/1936233599?accountid=14707>, doi:<http://dx.doi.org.proxy.library.upenn.edu/10.1017/gov.2016.30>.

Thaler, Richard H., and Cass R. Sunstein. 2008. *Nudge*. New Haven: Yale University Press.

United States, Election Assistance Commission, "2012 Election Administration and Voting Survey." *2012 Election Administration and Voting Survey*, 2013, pp. 1–121.

United States, Election Assistance Commission, "2014 Election Administration and Voting Survey." *2014 Election Administration and Voting Survey*, 2015, pp. 1–311.

United States, Election Assistance Commission, "2016 Election Administration and Voting Survey." *2016 Election Administration and Voting Survey*, 2017, pp. 1–226.

United States, Election Assistance Commission, "2018 Election Administration and Voting Survey." *2018 Election Administration and Voting Survey*, 2013, pp. 1–251.

*United States Elections Project*, [www.electproject.org/home/voter-turnout/](http://www.electproject.org/home/voter-turnout/).

Vasilogambros, Matt. "Glitches in California Embolden Automatic Voter Registration Foes." *Stateline*, The Pew Charitable Trusts, 17 Oct. 2019, [www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2019/10/17/glitches-in-california-embolden-automatic-voter-registration-foes](http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2019/10/17/glitches-in-california-embolden-automatic-voter-registration-foes).

"Voter Turnout Demographics." *United States Elections Project*, [www.electproject.org/home/voter-turnout/demographics](http://www.electproject.org/home/voter-turnout/demographics).

"Voting and Registration in the Election of November 2012." *Current Population Survey*, United States Census Bureau, 2013, <https://www.census.gov/data/tables/2012/demo/voting-and-registration/p20-568.html>.

"Voting and Registration in the Election of November 2014." *Current Population Survey*, United States Census Bureau, 2015, <https://www.census.gov/data/tables/time-series/demo/voting-and-registration/p20-577.html>.

"Voting and Registration in the Election of November 2016." *Current Population Survey*, United States Census Bureau, 2017, <https://www.census.gov/data/tables/time-series/demo/voting-and-registration/p20-580.html>.

"Voting and Registration in the Election of November 2018." *Current Population Survey*, United States Census Bureau, 2019, <https://www.census.gov/data/tables/time-series/demo/voting-and-registration/p20-583.html>.

Wattenberg, Martin P. *Is Voting for Young People?* Routledge, 2020.

Wolfinger, Raymond E., and Steven J. Rosenstone. *Who Votes?* Yale University Press, 1980. *JSTOR*, [www.jstor.org/stable/j.ctt32bffz](http://www.jstor.org/stable/j.ctt32bffz).

Xu, Jun. "Why Do Minorities Participate Less? The Effects of Immigration, Education, and Electoral Process on Asian American Voter Registration and Turnout." *Social Science Research*, vol. 34, no. 4, 2005, pp. 682–702., doi:10.1016/j.ssresearch.2004.11.002.

Yu, J. "Does State Online Voter Registration Increase Voter Turnout?" *Social Science Quarterly* 100, 2019, pp. 620-634., doi:10.1111/ssqu.12598.